

What is claimed is:

1. A stone cutting apparatus for cutting blocks of stone comprising:
  - a groove cutting device for cutting a groove in a first side of each block of stone along a first cutting plane;
  - a block cutting device for cutting each block of stone in a direction from an opposite side of the block opposite to the first side, the block cutting device cutting each block along a second cutting plane co-planar with the first cutting plane;
  - a block holder device including a linear member received in the groove of each block when each block is being cut by the block cutting device.
2. The stone cutting apparatus of claim 1, further comprising a conveyor for moving each block relative to the block cutting device, the linear member of the block holding device mounted to the conveyor.
3. The stone cutting apparatus of claim 2, wherein the conveyor includes a plurality of the linear members.
4. The stone cutting apparatus of claim 3, further comprising a block moving device for moving the blocks from the groove cutting device to the block cutting device.
5. The stone cutting apparatus of claim 4, wherein the block moving device includes a linear guide blade linearly aligned with the linear members of the conveyor.
6. The stone cutting apparatus of claim 5, further comprising:
  - a first cut block receiving device for receiving a first cut block portion;
  - a second cut block receiving device for receiving a second cut block portion;
  - wherein each of the first and second cut block portions falls under gravity from the block cutting device and the block holder device once the cut from block cutting device reaches the groove.

7. The stone cutting apparatus of claim 6, further comprising a block splitter positioned for receipt in the cut made by the block cutting device.
8. The stone cutting apparatus of claim 6, wherein the block cutting device includes a plurality of blades aligned in a common plane, a first blade of the plurality of blades including a cutting edge spaced from the block holder device a first distance, and the cutting edge of each successive blade spaced from the block holder device a distance less than the first distance, and less than any preceding blade, wherein the cutting edge of each blade rotates in same direction of movement of the conveyor.
9. The stone cutting apparatus of claim 8, wherein the block cutting device includes a control device for controlling the speed of each blade, wherein a tip speed of each blade is equal between all of the blades.
10. The stone cutting apparatus of claim 9, wherein the control device of the block cutting device includes a belt and sprocket for each blade.
11. The stone cutting apparatus of claim 1, wherein the groove cutting device includes a gauge fence for engaging a front of the block, and a clamp for holding the block during cutting of the groove.
12. The stone cutting apparatus of claim 11, wherein the groove cutting device include a second clamp for holding a second block of stone, wherein the groove can be formed in two stones with a single linear cut of the groove cutting device.
13. The stone cutting apparatus of claim 1, further comprising a block moving device for moving the blocks from the groove cutting device to the block cutting device.
14. The stone cutting apparatus of claim 1, further comprising:  
a first cut block receiving device for receiving a first cut block portion;

a second cut block receiving device for receiving a second cut block portion;  
wherein each of the first and second cut block portions falls under gravity from the block cutting device and the block holder device once the cut from the block cutting device reaches the groove.

15. The stone cutting apparatus of claim 1, wherein the block cutting device includes a plurality of blades aligned in a common plane, a first blade of the plurality of blades spaced from the block holder device a first distance, and each successive blade spaced from the block holder device a distance less than the first distance, and less than any preceding blade.

16. The stone cutting apparatus of claim 15, wherein the block cutting device includes a control device for controlling the speed of each blade, wherein a tip speed of each blade is equal between all of the blades.

17. The stone cutting apparatus of claim 16, wherein the control device of the block cutting device includes a belt and sprocket for each blade.

18. The stone cutting apparatus of claim 1, further comprising a block splitter positioned for receipt in the cut made by the block cutting device.

19. The stone cutting apparatus of claim 1, wherein the block cutting device includes a moveable saw which moves linearly relative to the block holder device.

20. A stone cutting apparatus for cutting blocks of stone comprising:  
first means for cutting a groove in each block of stone;  
means for holding each block of stone by engaging the groove;  
second means for cutting each block of stone into two pieces while the means for holding holds the block of stone.

21. The stone cutting apparatus of claim 20, wherein the second means for cutting cuts each block of stone in the same plane as the groove.
22. The stone cutting apparatus of claim 21, wherein the second means for cutting includes at least one cutting blade, and further comprising means for moving each block of stone relative to the at least one cutting blade.
23. The stone cutting apparatus of claim 22, wherein the means for moving includes a conveyor, and wherein the means for holding includes a plurality of linear members mounted to the conveyor, at least one of the linear members received in the groove of each block of stone to hold the respective blocks.
24. The stone cutting apparatus of claim 21, wherein the second means for cutting includes at least one cutting blade, and a mechanism for moving the cutting blade linearly relative to each block of stone.
25. The stone cutting apparatus of claim 20, further comprising means for moving each block of stone from the first means for cutting to the means for holding.
26. The stone cutting apparatus of claim 20, further comprising means for catching the cut portions of each block of stone after being cut by the second means for cutting.
27. The stone cutting apparatus of claim 20, further comprising block splitting means adjacent to the second means for splitting the block in the area between the groove and the cut from the second means for cutting.
28. The stone cutting apparatus of claim 20, wherein the second means for cutting includes at least one cutting blade, and a mechanism for moving the cutting blade linearly relative to each block of stone.

29. A method for cutting blocks of stone, comprising the steps of:  
cutting a groove in each block of stone;  
engaging the groove with a linear member to hold the block of stone;  
cutting each of the held blocks of stone from an opposite side of the stone,  
wherein the cut from the opposite side meets the groove to separate the block into two pieces.
30. The method of claim 29, further comprising the step of moving the linear member relative to a cutting device which cuts each of the held blocks, wherein the cutting device includes a plurality of rotating cutting blades, wherein a first blade has an outer edge positioned at a first distance from the linear member, and each additional cutting blade has the respective outer edge closer to the linear member as the linear member is moved relative to the cutting device.
31. The method of claim 30, further comprising the step of moving the blocks from a first station which cuts the grooves to the cutting device, and further comprising providing a guide blade, and aligning each groove with the linear member before each block reaches the cutting device.
32. The method of claim 29, further comprising the steps of cutting a further groove in one piece of the two pieces of the cut block, wherein the one piece is engaged with the linear member, and the one piece is further cut from an opposite side, wherein the further cut from the opposite side meets the further groove to separate the one piece into two further pieces.
33. The method of claim 29, further comprising splitting the held blocks of stone after the cutting step from the opposite side.
34. The method of claim 29, further comprising the step of moving a cutting device relative to each of the held blocks to cut the held blocks from the opposite side.

35. A thin stone for use with mortar for covering a wall comprising:  
a rock body made from natural stone and having a front, an opposite facing back, and a side between the front and the back;  
a protruding linear ridge extending from the back of the rock body.
36. The thin stone of claim 35, where in the linear ridge is formed by making a first planar cut from one side of the rock body, and a second planar cut from an opposite side of the rock body, wherein the first and second planar cuts each define planes which are coplanar with each other.
37. A wall comprising:  
a.) a backing defining a vertical surface;  
b.) a layer of mortar held by the backing;  
c.) a plurality of thin stones each including:  
i.) a rock body made from natural stone and having a front, an opposite facing back, and a side between the front and the back;  
ii.) a protruding linear ridge extending from the back of the rock body, wherein the backs of each rock body are held by the mortar with the linear ridges protruding into the mortar.
38. The wall of claim 37, wherein the linear ridge of each thin stone is formed by making a first planar cut from one side of the rock body, and a second planar cut from an opposite side of the rock body, wherein the first and second planar cuts each define planes which are coplanar with each other.
39. A method of forming a wall comprising of steps of:  
providing a backing defining a vertical surface;  
applying mortar to the backing;  
pressing a plurality of natural stones into the mortar, wherein each natural stone includes a projecting linear ridge pressed into the mortar.

40. The method of claim 39, wherein the linear ridge of each natural stone is formed by making a first planar cut into the natural stone, followed by a second planar cut into the natural from an opposite wherein each of the planar cuts are coplanar.

41. A stone cutting apparatus for cutting a block of stone comprising:  
a groove cutting device for cutting a groove in a first side of the block of stone along a first cutting plane;  
a block cutting device for cutting the block of stone in a direction from another side of the block;  
a block holder device including a projecting member received in the groove of the block when the block is being cut by the block cutting device.

42. The stone cutting apparatus of claim 41, further comprising a conveyor for moving the block relative to the block cutting device, the projecting member of the block holding device mounted to the conveyor.

43. The stone cutting apparatus of claim 41, further comprising a mechanism for moving the block cutting device relative to the block holder device.

44. The stone cutting apparatus of claim 41, wherein the block holder device includes a movable mount wherein the projecting member is positionable at a plurality of angles relative to the block cutting device.

45. A method for cutting a block of stone, comprising the steps of:  
cutting a groove in a side of the block of stone;  
engaging the block of stone with a projecting member received in the groove;  
cutting the block of stone from another side of the block of stone while the block of stone is held by the projecting member.